

REMARKS

Claims 1, 2, 4-37, and 44-47 are now pending in the application, of which Claim 33 has been allowed. Claims 1, 2, 4-34, and 34-37 stand rejected. Claims 44-47 are new. Support for the new claims can be found in at least Figure 3 and paragraph 46. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Applicants respectfully request an Examiner interview related to this application, in as much as several attempts by telephone to request an interview have been unsuccessful. Applicants believe an interview would be useful to expedite prosecution of the application.

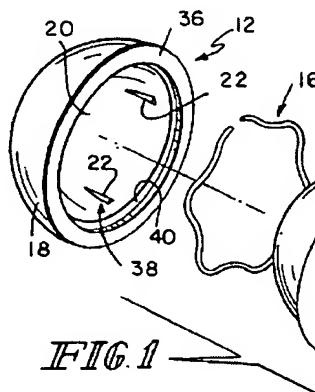
REJECTION UNDER 35 U.S.C. § 103

Claims 1, 2, 4-32, and 34-37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gray, III (U.S. Pat. No. 5,800,555) in view of Sullivan et al. (U.S. Publication No. 2003/0125810). This rejection is respectfully traversed.

Independent Claims 1, 22, 27 and 34 all include the limitation that the integral generally spherical bearing surface is a polished bearing surface. These independent claims further contain the limitation that the integral generally spherical bearing surface is configured to directly engage with an articulating surface of a femoral component. This is opposed to the support surfaces in each of the cited references, which simply

support a bearing insert and are not structurally configured to directly engage an articulating surface of a femoral component.

With respect to the rejections of Claims 1-17, 19-32 and 34-37 over Gray in view of Sullivan et al.), column 3, lines 27-30 of Gray states, "The inner surface 20 of acetabular cup 12 is provided with a plurality of anti-rotation lugs 22 which engage the outer surface 42 of the bearing liner 14 upon insertion of the bearing liner 14 into the acetabular cup 12." (emphasis added)



Applicants assert that the structure of the inner surface 20 of the cup 22 is not capable of performing as an articulating bearing surface as claimed because of the anti-rotation lugs 22. Further, Applicants assert Gray teaches away from the polished low friction surface in Sullivan. In this regard, as noted on page 3 Office Action, Sullivan et al teaches "the bearing surface of the prosthesis which should have minimum friction and maximum resistance to wear ..." This is opposed to Gray which teaches "anti-rotation lugs" specifically designed to prevent relative rotation of members with regard to the member contacting the interface surface of Gray. The Supreme Court recently addressed teaching away in the KSR opinion:

The [Adams] Court relied upon the corollary principle that when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious. *Id.*, at 51-52, 86 S.Ct. 708. When Adams designed his battery, the prior art warned that risks were involved in using the types of electrodes he employed.

KSR International Co. V. Teleflex Inc., 127 S.Ct. at 1740, 82 USPQ2d at 1395 (emphasis added).

Applicants note that the use of a polished interior surface allows the physician to interoperatively determine whether to use a metal on metal bearing system, a lined, or a constrained bearing system. Additionally, the system allows for revision of the Joint without replacing the acetabular cup. Applicants' respectfully assert that these are useful functions and add to the nature and quality of the prosthetic.

Applicants further respectfully assert that the proposed modification of the Gray reference cannot render the prior art unsatisfactory for its intended purpose. As such, one skilled in the art would not combine the references. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). See also *McGinley v. Franklin Sports Inc.*, 60 U.S.P.Q.2d 1001 (Fed. Cir. 2001). In this regard, modification of the interior surface of the cup of Gray to include both the surface of Sullivan and removing the anti-rotation lugs (22) would render Gray unsatisfactory as a bearing inasmuch as the lugs are necessary in the Gray design to prevent rotation of the polymer liner with respect to the cup.

Further, Applicants respectfully submit the proposed modification of the Gray reference changes the principle of operation of the Gray reference inasmuch as the interior surface of Gray is configured to prevent rotation of the member in contact with the interior surface (see the discussion above related to the non-rotation lugs 22). It is a long held principle that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, the

teachings of the references are not sufficient to render the claims *prima facia* obvious, *In re Ratti*, 270 F.2d 810 (CCPA 1959). (See MPEP §2143.01).

Claims 21 and 34 contain the limitation that the second prosthetic defines a generally capsule shaped cavity that allows for rotation and translation of the head. In rejecting these claims, Figure 6 of the Gray reference is cited. Applicants note that Figure 6 of the Gray reference discloses an acetabular cup with a constraining ring. This constraining ring, while allowing the rotation of the femoral head, prevents translation of the femoral head. As such, the rejection of these claims is improper.

With respect to the cited Sullivan reference, Applicants note that the cited passage on hardness and smoothness is directed to a convex humeral articulating portion of a prosthetic joint and not the concave surface of Claim 1 and its dependants. Further, the figures of the Sullivan reference appear to disclose at least a two-piece glenoid component having a concave bearing surface. Figures 1 and 2 show a concave bearing surface formed of more than one material (see element 8). There is no teaching in the Sullivan reference of a concave prosthetic that can act both as a support of a second prosthetic and an articulating bearing surface. One simply would not be motivated to combine the references to provide a polished concave bearing surface with a locking mechanism configured to couple a second implant with a spherical bearing surface. This combination is simply missing from the references.

NEW CLAIMS

Claims 44-47 are newly presented. Claims 44 and 47 depend on independent Claim 1. Claim 45 depends on independent Claim 22. Applicants respectfully submit

these claims can be distinguished from the cited references for at least the reasons stated above under the response to Rejection Under 35 U.S.C. § 103. In this regard, Applicants submit that the cited references cannot be combined as the proposed modification of the references make them unsatisfactory for their intended purpose. Applicants further assert that the structure of the Gray reference cannot function as asserted by the Office.

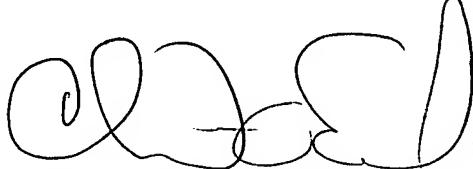
Claim 46 depends upon independent Claim 34. For the reasons stated above, Applicants submit the Gray reference teaches away from an acetabular cup with a polished interior surface. As such, Applicants submit for this and other reasons, the combination of the references is improper.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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